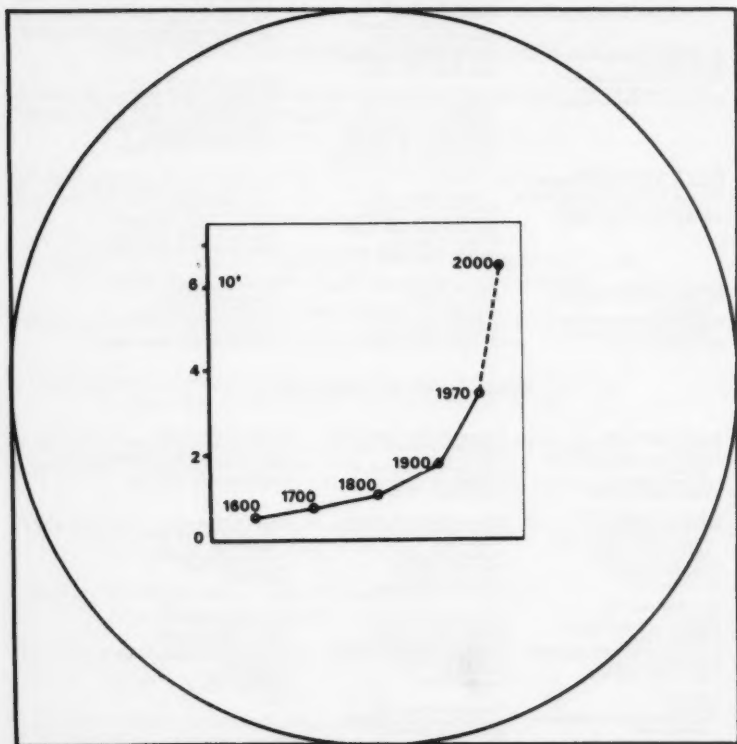


Vol. 13 1976
JANUARY—JUNE

CONTRACEPTION

AN INTERNATIONAL JOURNAL



DANIEL R. MISHELL, Jr., M.D. — Editor

Publisher: GERON-X, INC., LOS ALTOS, CALIF.

BOARD OF ASSOCIATE EDITORS

Wendy Baldwin, Ph.D.
Behavioral Sciences Branch
Center for Population Research
National Institute of Child Health
and Human Development
Bethesda, Maryland 20014

Gerald S. Bernstein, Ph.D., M.D.
Associate Professor
Department of Obstetrics and
Gynecology
USC School of Medicine
Los Angeles, California 90033

M. C. Chang, Ph.D., Sc.D.
Senior Scientist
Worcester Foundation for
Experimental Biology
Shrewsbury, Massachusetts 01545

Philip A. Corfman, M.D.
Director of Population Research
National Institute of Child Health
and Human Development
Bethesda, Maryland 20014

Joseph W. Goldzieher, M.D.
Director, Division of Clinical
Sciences
Southwest Foundation for
Research and Education
San Antonio, Texas

Roy O. Greep, Ph.D.
Director, Bio-Medical Division
Laboratory of Human Reproduc-
tion & Reproductive Biology
Harvard Medical School
45 Shattuck Street
Boston, Massachusetts 02115

Roy Hertz, M.D., Ph.D.
Research Professor
Departments of Pharmacology
and Obstetrics and Gynecology
George Washington University
Medical Center
Washington, D.C. 20037

Anrudh K. Jain, Ph.D.
Assistant Director
The Population Council
Biomedical Division
The Rockefeller University
York Avenue & 66th Street
New York, N.Y. 10021

William D. Odell, M.D.
Professor and Chairman
Department of Medicine
Harbor General Hospital
U.C.L.A. School of Medicine
Torrance, California 90509

C. Alvin Paulsen, M.D.
Professor of Medicine
Department of Medicine
University of Washington
School of Medicine
Seattle, Washington 98114

John J. Sclarra, M.D., Ph.D.
Chief of Staff
Prentice Women's Hospital and
Maternity Center
333 East Superior St.
Chicago, Illinois 60611

Sheldon Segal, Ph.D.
Director, Bio-Medical Division
The Population Council
Rockefeller University
York Avenue and 66th Street
New York, New York 10021

Sidney Shulman, Ph.D.
Professor and Chairman
Department of Microbiology
New York Medical College
Fifth Avenue at 106th Street
New York, New York 10029

Anna L. Southam, M.D.
Program Officer
International Division-Population
The Ford Foundation
320 East 43rd Street
New York, New York 10017

William N. Spellacy, M.D.
Professor and Chairman
Department of Obstetrics and
Gynecology
The University of Florida
College of Medicine
Gainesville, Florida 32601

Howard J. Tatum, Ph.D., M.D.
Associate Director
Biomedical Division
The Population Council
The Rockefeller University
New York, New York 10021

Christopher Tietze, M.D.
Associate Director
Bio-Medical Division
The Population Council
2 East 103rd Street
New York, New York 10029

Corresponding Editors for CONTRACEPTION

Elisair Coutinho, M.D.
Professor
Department of Biochemistry and
Obstetrics
University of Bahia
Salvador, Bahia, BRAZIL

P. Giorgio Crosignani, M.D.
Professor incaricato di
Endocrinologia Ginecologica
alla Facoltà di Medicina
Dell'Università di Milano
20122 Milano, ITALY
Via Commedia 12

Egon Diczfalusy, M.D.
Professor
Reproductive Endocrinology
Research Unit
Swedish Medical Research Council
Karolinska sjukhuset
Stockholm 60, SWEDEN

J. Ferin, M.D.
Professor
Physiology of Human Reproduction
Research Unit
University of Louvain Hospital
Louvain, BELGIUM

Carlos Gual, M.D.
Instituto Nacional de la Nutrición
Hospital de Enfermedades de la
Nutrición
Av. San Fernando y
Viaducto Tlalpan
MEXICO 22, D.F., MEXICO

I. Hallbrecht, M.D.
Professor
Department of Obstetrics and
Gynecology
Tel Aviv University Medical School
Tel Aviv, ISRAEL

Professor Dr. med. Jürgen Haller
Professor of Obstetrics and
Gynecology
Universitäts-Frauenklinik
Humboldtallee 5
34 Göttingen, GERMANY

Professor Doctor A.A. Haspels
Department of Obstetrics and
Gynecology
Academic Hospital
University of Utrecht
Catharinaesingel 101
Utrecht, NETHERLANDS

Dr. A. B. Kar, Ph.D., F.N.I.
Deputy Director and Head
Division of Endocrinology
Central Drug Research Institute
Chatter Manzil Palace
Post Box No. 173
Lucknow, INDIA

Tapen Luukkainen, M.D.
Steroid Research Laboratory
University of Helsinki
Department of Medical Chemistry
Siltavuorenpenger 10 A
SF-00170 Helsinki 17, FINLAND

John R. Newton, M.B.
Department of Obstetrics and
Gynecology
King's College Hospital Medical
School
University of London
Denmark Hill
London, SE5 8RX
ENGLAND

Dr. M. R. N. Prasad
Professor of Zoology
University of Delhi
Delhi 7, INDIA

Dr. (Mrs) Shanta S. Rao
Reproductive Physiology Unit
Indian Council of Medical Research
Seth G. S. Medical College
Parel, Bombay 12, INDIA

Rodney P. Shearman
Professor of Obstetrics and
Gynecology
The University of Sydney
Sydney 2006, NSW
AUSTRALIA

Sabita Tejuja, M.D.
Deputy Director General
Contraceptive Testing Unit
Indian Council of Medical Research
Ansar Nagar
Post Box 4508
New Delhi-110016
INDIA

Martin P. Vessey, M.D.
Professor, University Department of
Social and Community Medicine
University of Oxford
8 Keble Road
Oxford, OX1 3 QN
ENGLAND

Juan Zanartu, M.D.
Associate Professor
Department of Experimental
Fertility
Universidad de Chile Clínica
Obstétrica
Hospital "José Joaquín Aguirre"
Casilla 6637
Santiago, CHILE

CONTRACEPTION

January 1976

Volume 13, Number 1

Endolymphatic Stromal Myosis in Two Patients on Progestagen Therapy Charles M. Behary, Leah Dollberg and Bernard Czernobilsky	1
Four Years Experience with the Cu7 200 Device - Endouterine Copper in Fertility Control J. Zipper, M. Medel, L. Pastene, M. Rivera, L. Torres, A. Osorio and C. Toscanini	7
Comparative Glycolytic Metabolism in the Normal and in the Copper Treated Human Endometrium Adolfo Rosado, Omar Hernández, Ramón Aznar and Juan José Hicks	17
A Comparison of the Dalkon Shield and Gravigard (Copper 7) Intra-Uterine Devices in Southampton J. F. Miller, E. Williamson, D. Morgan and Max Elstein	31
Unusual Uterine Perforation by the Copper-T Intrauterine Device and Removal by Laparoscopy Jürgen R. Strecker and Herbert Kraus	47
Studies of Duplex (Copper-Coated) Wires for Use in Intrauterine Devices Melvin R. Sikov, James R. Divine and Patricia L. Hackett	55
Scanning Electron Microscopy of Inert and Copper-Bearing Intra-Uterine Devices Jan Van Eyck, Alfons Lagasse and Michel Thiery	65
Effects of Oral Contraceptive Steroids on Pituitary Prolactin Secretion S. Abu-Fadil, G. DeVane, T. M. Siler and S. S. C. Yen	79
Successful First Trimester Abortion with 15(S)15-Methyl-Prostaglandin F _{2α} Methyl Ester Vaginal Suppositories U. Borell, M. Bygdeman, A. Leader, V. Lundström and J. N. Martin, Jr. . . .	87
Chronoperiodicity in Response to the Intra-Amniotic Injection of Prostaglandin F _{2α} M. G. Elder, M. Stone and T. P. Dutt	95
Oestrogen Synthesis during Delayed Implantation in the Rat John Watson and M. Alam	101
Current Bibliographic Index of Mammalian Reproduction. LXXXI Julius S. Greenstein	109

CONTRACEPTION is published monthly by Geron-X, Inc.,
Box 1108, Los Altos, California 94022, USA.

© 1976, Geron-X, Inc.

Two volumes per year
 Personal Subscription \$45
 Institutional Subscription \$90
 Add \$5 for surface postage outside USA
 Add \$14 for airmail USA. Add \$24 for airmail outside USA

Second-class postage paid at Los Altos, Calif. 94022, and at additional mailing office

CONTRACEPTION

February 1976

Volume 13, Number 2

Immunological Methods to Prevent Pregnancy: an Editorial Comment Sheldon J. Segal	125
Introduction G. P. Talwar	129
Processing of the Preparations of β -Subunit of Human Chorionic Gonadotropin for Minimization of Cross-Reactivity with Human Luteinizing Hormone G. P. Talwar, N. C. Sharma, S. K. Dubey, M. Salahuddin, N. Shastri and S. Ramakrishnan	131
Immunological Properties of Dinitrophenyl Derivatives of Beta-Subunit of the Human Chorionic Gonadotropin S. K. Dubey, M. Salahuddin, N. Shastri and G. P. Talwar	141
Kinetics of Antibody Response in Animals Injected with Processed Beta-HCG Conjugated to Tetanus Toxoid (Pr- β -HCG-TT) G. P. Talwar, S. K. Dubey, M. Salahuddin and N. Shastri	153
Immunological Reactivity of Antibodies Produced by Pr- β -HCG-TT with Different Hormones M. Salahuddin, S. Ramakrishnan, S. K. Dubey and G. P. Talwar	163
Investigations on the Ability of Antisera Produced by Pr- β -HCG-TT to Neutralize the Biological Activity of HCG C. Das, M. Salahuddin and G. P. Talwar	171
Investigations on Pharmacopoeial Safety, Microbial Sterility and Pyrogens of Pr- β -HCG-TT L. Gupta, S. K. Dubey and G. P. Talwar	183
Acute Toxicity and Pharmacology of β -Human Chorionic Gonadotrophin Conjugated Tetanus Toxoid (Pr- β -HCG-TT) C. R. Prasad, R. C. Srimal and B. N. Dhawan	189
Survival of Animals Injected with Pr- β -HCG-TT S. K. Dubey, N. C. Sharma and G. P. Talwar	195
Metabolic, Endocrine and Organ Functions in Monkeys Immunized with Pr- β -HCG-TT Vaccine N. C. Sharma, B. K. Goel, J. S. Bajaj and G. P. Talwar	201
Autopsy Report on Rhesus Monkeys Immunized with Pr- β -HCG-TT Vaccine I. Nath, P. D. Gupta, U. N. Bhuyan and G. P. Talwar	213

(Continued)

Screening for Autoantibodies in Human Subjects Immunized with Pr- β -HCG-TT	
Indira Nath, S. Whittingham, P. H. Lambert and G. P. Talwar	225
Hypersensitivity Reactions in Monkeys Immunized with Pr- β -HCG-TT	
Indira Nath, S. K. Dubey and G. P. Talwar	231
Antibody Response to Pr- β -HCG-TT Vaccine in Human Subjects	
G. P. Talwar, S. K. Dubey, M. Salahuddin, C. Das, V. Hingorani and S. Kumar	237
Influence of HCG and Tetanus Toxoid Injections on the Antibody Titers in a Subject Immunized with Pr- β -HCG- TT	
S. Ramakrishnan, S. K. Dubey, C. Das, M. Salahuddin, G. P. Talwar, Sneha Kumar and V. Hingorani	245
Clinical Profile and Toxicology Studies on Four Women Immunized with Pr- β -HCG-TT	
S. Kumar, N. C. Sharma, J. S. Bajaj, G. P. Talwar and V. Hingorani	253
Current Bibliographic Index of Mammalian Reproduction. LXXXII	
Julius S. Greenstein	269
Errata	285

CONTRACEPTION

March 1976

Volume 13, Number 3

Inhibition of the Positive Feedback of Oestradiol during Treatment with Subcutaneous Implants of d-Norgestrel E. Weiner, E.D.B. Johansson and L. Wide.	287
The Effect of Various Contraceptive Hormonal Therapies in Women with Normal and Diabetic Oral Glucose Tolerance Test Ramón Aznar, Roger Lara, David Zarco and Luis González.	299
Maintenance of Lactation by Means of Continuous Low-Dose Progestogen Given Post-Partum as a Contraceptive Juan Zañartu, Eneida Aguilera and Gloria Muñoz-Pinto	313
Therapeutic Abortion of Early Human Gestation with Intramuscular 15-Methyl Prostaglandin F _{2α} N. Takaki, D. Tredway, P. Toomer, W. Murray and T. Daane	319
Self-Prescription of Oral Contraceptives in Bogota, Colombia Anthony R. Measham	333
Anti-Ovulatory/Anti-Pregnancy Effects of [D-Phe ²]-LRH Analogs Administered Early in the Rat Estrous Cycle C.W. Beattie, A. Corbin, T.J. Foell, V. Garsky, R.W.A. Rees and J. Yardley.	341
Effect of Intrauterine T-Device and Copper-T on <i>In Vitro</i> Uptake of Estradiol-17β-6,7- ³ H and Progesterone-1,2- ³ H in Monkey Uterus and Cervix Maya Ghosh and S.K. Roy	355
Experience with the Copper T and Silicone Shell Loop in Parous Women: a Randomized Study S. Roy, S.P. Azen, D.R. Mishell, Jr., M.C. Pike and J. Casagrande	365
An Injectable Sustained Release Fertility Control System Lynne C. Anderson, Donald L. Wise and John F. Howes	375
Attempted Prostaglandin Abortion in Two Cases of Abdominal Pregnancy Mitchell S. Golbus and Richard L. Sweet.	385
Announcement.	389
Current Bibliographic Index of Mammalian Reproduction. LXXXIII Julius S. Greenstein	391

CONTRACEPTION

April 1976

Volume 13, Number 4

The <i>In Vitro</i> Binding of Estradiol by the Guinea Pig Cerebral Cortex E. Pedroza and J. M. Rosner	407
Some Immune Response of Gambian Women Taking the Combined Oral Contraceptive Pill R. S. Bray	417
Concepts of Reproduction and its Regulation in the History of Western Civilization Charles W. Bodemer	427
Potentials for Fertility Regulation at the Tubal Level Luigi Mastroianni, Jr.	447
Guidelines for Assessment of Potential Hepatotoxic Effects of Synthetic Androgens, Anabolic Agents and Progestagens in Their Use in Males as Antifertility Agents James L. Boyer, Rudolf Preisig, G. Zbinden, D. M. de Kretser, Christina Wang and C. Alvin Paulsen	461
Research Training in the Biomedical Aspects of Human Reproduction and Family Planning in Developing Countries A. Kessler and C. C. Standley	469
Relative Antifertility Activity of Three Vaginal Contraceptive Products in the Rabbit: Relationship to <i>In Vitro</i> Data R. E. Homm, G. E. Doscher, E. J. Hummel and F. C. Greenslade	479
Gray-Scale Sonography and the IUD J. Van Eyck, P. Defoort and M. Thiery	489
Medicated Intrauterine Silastic Spheres Do Not Prevent Pregnancy in Rabbits Cheryl M. Heesch and Barrie J. Hodgson	497
A D-Norgestrel-Releasing IUD C. G. Nilsson, E. D. B. Johansson and T. Luukkainen	503
The Utilization of Conception Cohorts for the Evaluation of Family Planning Programs Roy G. Smith, Patricia G. Steinhoff, James A. Palmore and Charlotte Payne	515
Current Bibliographic Index of Mammalian Reproduction. LXXXIV Julius S. Greenstein	531

CONTRACEPTION

May 1976

Volume 13, Number 5

The Contrast Pressure Technique for Female Sterilization Thomas S. Moulding, William Straw and Horace Thompson . . .	547
Clinical Experience with the Uterine Progesterone System (Progestasert®) G. Zador, B. A. Nilsson, B. Nilsson, N. O. Sjöberg, L. Weström and J. Wiese	559
Efficacy of Various Locally Applied Chemicals as Contraceptational Agents in Rats E. A. Conner, D. A. Blake, T. H. Parmley, L. S. Burnett and T. M. King	571
The Effect of Subdermal Testosterone Filled Polydimethylsiloxane Implants on Spermatogenesis in Rhesus Monkeys (<i>Macaca mulata</i>) L. L. Ewing, Bruce Schanbacher, Claude Desjardins and Vincent Chaffee	583
Nature of Estrogenic and Anti-Estrogenic Actions of Centchroman on Rat Uterus Somnath Roy and J. K. Datta	597
The Medroxyprogesterone Acetate Intravaginal Silastic Ring as a Contraceptive Device M. Thiery, D. Vandekerckhove, M. Dhont, A. Vermeulen and J. M. Decoster	605
Investigation of Danazol as a Contraceptive Agent Anne Colston Wentz, Georgeanna Seegar Jones and Karan C. Sapp	619
Laparoscopic Tubal Sterilization: Long-Term Postoperative Follow-Up Lidia M. Rubinstein, Thomas B. Lebherz and Vicki Kleinkopf . . .	631
Antifertility and Dominant Lethal Mutation Studies in Male Rats with <i>dl-α</i> -Chlorohydrin and an Amino-Analogue Pamela Jones and H. Jackson	639
Errata	647, 648
Current Bibliographic Index of Mammalian Reproduction. LXXXV Julius S. Greenstein	649

CONTRACEPTION

June 1976

Volume 13, Number 6

Effect of Centchroman on the Uptake of Tritiated Estradiol-17 β and Progesterone by Different Tissues of Ovariectomized Rats G. L. Kumari, J. K. Datta, Somnath Roy and S. Ray	665
The Effect of Various Dosages of Lynestrenol on the Plasma Levels of Oestrogens and Progesterone during the Menstrual Cycle in the Rhesus Monkey W. T. K. Bosu, L.-E. Edqvist, P. Lindberg, K. Martinsson and E. D. B. Johansson	677
Contraception with Megestrol Acetate Implants. Megestrol Acetate Levels in Plasma and the Influence on the Ovarian Function E. Weiner and E. D. B. Johansson	685
The Abortifacient Effects of a Newly Developed Vaginal Silastic Device Impregnated with an 0.5% Concentration of 15(S)-15-Methyl-Prostaglandin F $_{2\alpha}$ Methyl Ester in the First Trimester Niels H. Lauersen and Kathleen H. Wilson	697
Vacuum Aspiration at Therapeutic Abortion - Effect of Cu-IUD Insertion at Operation on Post-Operative Blood Loss Folke Solheim and Jan Rydnert	707
Copper Surface Area and Clinical Performance of the Copper-Bearing T Intrauterine Device Paolo Marangoni, Germán Rodriguez and Aníbal Faúndes	715
Combination Therapy for Midtrimester Abortion: Laminaria and Analogues of Prostaglandins Phillip G. Stubblefield, Frederick Naftolin, Eddington Y. Lee, Frederic D. Frigoletto and Kenneth J. Ryan	723
The Role of Endometrial Alkaline Phosphatase in the Mechanism of Action of the Intrauterine Device in the Rat M. Roy Chaudhury, P. Israngkun and R. R. Chaudhury	731
Cytological Follow-Up of 200 Women Using Copper Device for Contraception M. Z. Affandi and K. D. Virkar	739
Uterine Response to Prostaglandin E $_2$ under Oral Contraceptives Mokhtar Toppozada, Mohie Khawessah, Said Shaala, Samy Said and Mohamed Osman	749
Obituary: Dr. Amiya Bhushon Kar	763
Current Bibliographic Index of Mammalian Reproduction. LXXXVI Julius S. Greenstein	765
Author Index for Volume 13	781
Subject Index for Volume 13	783

1. The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present and for the development of a sound policy for the future.

2. The second part of the paper discusses the role of the government in the development of the United States. It is argued that the government has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

3. The third part of the paper discusses the role of the individual in the development of the United States. It is argued that the individual has played a crucial role in the development of the country, and that his actions have been guided by a set of principles that have been passed down from generation to generation.

4. The fourth part of the paper discusses the role of the community in the development of the United States. It is argued that the community has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

5. The fifth part of the paper discusses the role of the nation in the development of the United States. It is argued that the nation has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

6. The sixth part of the paper discusses the role of the world in the development of the United States. It is argued that the world has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

7. The seventh part of the paper discusses the role of the future in the development of the United States. It is argued that the future has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

8. The eighth part of the paper discusses the role of the past in the development of the United States. It is argued that the past has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

9. The ninth part of the paper discusses the role of the present in the development of the United States. It is argued that the present has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

10. The tenth part of the paper discusses the role of the future in the development of the United States. It is argued that the future has played a crucial role in the development of the country, and that its actions have been guided by a set of principles that have been passed down from generation to generation.

INDEX TO VOLUME 13

AUTHOR INDEX

- Abu-Fadil, S., 79
 Adolfo, R., 17
 Affandi, M.Z., 739
 Aguilera, E., 313
 Alam, M., 101
 Anderson, L.C., 375
 Azen, S.P., 365
 Aznar, R., 17 & 299
 Bajaj, J.S., 201 & 253
 Beattie, C.W., 341
 Behary, C.M., 1
 Bhuyan, U.N., 213
 Blake, D.A., 571
 Bodemer, C.W., 427
 Borell, U., 87
 Bosu, W.T.K., 677
 Boyer, J.L., 461
 Bray, R.S., 417
 Burnett, L.S., 571
 Bygdeman, M., 87
 Casagrande, J., 365
 Chaffee, V., 583
 Chaudhury, M.R., 731
 Chaudhury, R.R., 731
 Conner, E.A., 571
 Corbin, A., 341
 Czernobilsky, B., 1
 Daane, T., 319
 Das, C., 171, 237 & 245
 Datta, J.K., 597 & 665
 Decoster, J.M., 605
 Defoort, P., 489
 deKretser, D.M., 461
 Desjardins, C., 583
 De Vane, G., 79
 Dhawan, B.N., 189
 Dhont, M., 605
 Divine, R., 55
 Dollberg, L., 1
 Doscher, G.E., 479
 Dubey, S.K., 131, 141, 153,
 163, 183, 195, 231, 237
 & 245
 Dutt, T.P., 95
 Edqvist, L.-E., 677
 Elder, M.G., 95
 Elstein, M., 31
 Ewing, L.L., 583
 Faúndes, A., 715
 Foell, T.J., 341
 Frigoletto, F.D., 723
 Garsky, V., 341
 Ghosh, M., 355
 Goel, B.K., 201
 Golbus, M.S., 385
 González, L., 299
 Greenslade, F.C., 479
 Gupta, L., 183
 Gupta, P.D., 213
 Hackett, L., 55
 Heesch, C.M., 497
 Hernández, O., 17
 Hicks, J.J., 17
 Hodgson, B.J., 497
 Homm, R.E., 479
 Howes, J.F., 375
 Hummel, E.J., 479
 Israngkun, P., 731
 Jackson, H., 639
 Johansson, E.D.B., 287, 503, 677,
 & 685
 Jones, G.S., 619
 Jones, P., 639
 Kamboj, V.P., 763
 Kessler, A., 469
 Khowessah, M., 749
 King, T.M., 571
 Kleinkopf, V., 631
 Kraus, H., 47
 Kumar, S., 237, 245 & 253
 Kumari, G.L., 665
 Lagasse, A., 65
 Lambert, P.H., 225
 Lara, R., 299
 Lauerson, N.H., 697
 Leader, A., 87
 Lebherz, T.B., 631
 Lee, E.Y., 723
 Lindberg, P., 677
 Lundström, V., 87
 Luukkainen, T., 503
 Marangoni, P., 715
 Martin, J.N., Jr., 87
 Martinsson, K., 677
 Mastroianni, L., Jr., 447
 Measham, A.R., 333

CONTRACEPTION

INDEX TO VOLUME 13

AUTHOR INDEX (CONTINUED)

- Medel, M., 7
 Miller, J.F., 31
 Mishell, D.R., Jr., 365
 Morgan, D., 31
 Moulding, T.S., 547
 Muñoz-Pinto, G., 313
 Murray, W., 319
 Naftolin, F., 723
 Nath, I., 213, 225 & 231
 Nilsson, B., 559
 Nilsson, B.A., 559
 Nilsson, C.G., 503
 Osman, M., 749
 Osorio, A., 7
 Palmore, J.A., 515
 Parmley, T.H., 571
 Pastene, L., 7
 Paulsen, C.A., 461
 Payne, C., 515
 Pedroza, E., 407
 Pike, M.C., 365
 Prasad, C.R., 189
 Preisig, R., 461
 Ramakrishnan, S., 131, 163
 & 245
 Ray, S., 665
 Rees, R.W.A., 341
 Rivera, M., 7
 Rodriguez, G., 715
 Rosner, J.M., 407
 Roy, S., 365, 597 & 665
 Roy, S.K., 355
 Rubinstein, L.M., 631
 Ryan, K.J., 723
 Rydnert, J., 707
 Said, S., 749
 Salahuddin, M., 131, 141,
 153, 163, 171, 237 & 245
 Sapp, K.C., 619
 Schanbacher, B., 583
 Segal, S.J., 125
 Shaala, S., 749
 Sharma, N.C., 131, 195, 201
 & 253
 Shastri, N., 131, 141 & 153
 Sikov, M.R., 55
 Siler, T.M., 79
 Sjöberg, N.O., 559
 Smith, R.G., 515
 Solheim, F., 707
 Srimal, R.C., 189
 Standley, C.C., 469
 Steinhoff, P.G., 515
 Stone, M., 95
 Straw, W., 547
 Strecker, J.R., 47
 Stubblefield, P.G., 723
 Sweet, R.L., 385
 Takaki, N., 319
 Talwar, G.P., 129, 131, 141, 153
 163, 171, 183, 195, 201, 213,
 225, 231, 237, 245 & 253
 Thiery, M., 65, 489 & 605
 Thompson, H., 547
 Toomer, P., 319
 Topozada, M., 749
 Torres, L., 7
 Toscanini, C., 7
 Tredway, ., 319
 Vandekerckhove, D., 605
 Van Eyck, J., 65 & 489
 Vermeulen, A., 605
 Virkar, K.D., 739
 Wang, C., 461
 Watson, J., 101
 Weiner, E., 287 & 685
 Wentz, A.C., 619
 Weström, L., 559
 Whittingham, S., 225
 Wide, L., 287
 Wiese, J., 559
 Williamson, E., 31
 Wilson, K.H., 697
 Wise, D.L., 375
 Yardley, J., 341
 Yen, S.S.C., 79
 Zador, G., 559
 Zañartu, J., 313
 Zarco, D., 299
 Zbinden, G., 461
 Zipper, J., 7

INDEX TO VOLUME 13

SUBJECT INDEX

- Abdominal pregnancy, attempted prostaglandin abortion, 385
- Abortion,
 - early gestation, intramuscular 15-methyl PGF₂α, 319
 - effect of Cu-IUD insertion immediately following, 707
 - first trimester, use of 15-me-F₂α-me-ester vaginal suppositories, 87
 - first trimester, vaginal silastic device with 15-ME-PGF₂α, 697
 - midtrimester, methyl PGE₂ and laminaria, 723
- Accessory sex organ function, effect of subdermal testosterone implants (monkey), 583
- Alkaline phosphatase, endometrial, role in mechanism of action in IUD (rat), 731
- Anti-estrogenic actions of centchroman on uterus (rat), 597
- Anti-ovulatory/anti-pregnancy effects, LRH analogs (rat), 341
- Antibodies produced by Pr-β-HCG-TT, immunological reactivity with different hormones (monkey, goat), 163
- Antibody response, kinetics, animals injected with Pr-β-HCG-TT, 153
- Antibody response to Pr-β-HCG-TT vaccine, 237
- Antifertility activity of vaginal contraceptive products (rabbit), 479
- Antifertility agents, male, guidelines for assessment of potential hepatotoxic effects, 461
- Antifertility studies in male, α-chlorohydrin (rat), 639
- Antisera produced by Pr-β-HCG-TT, ability to neutralize biological activity of HCG (goat, monkey), 171
- Autoantibodies, screening, immunization with Pr-β-HCG-TT, 225
- Autopsy report, immunization with Pr-β-HCG-TT vaccine (monkey), 213
- β-subunit of HCG,
 - immunological properties of dinitrophenyl derivatives (mouse, rabbit, monkey), 141
 - processing for minimization of cross-reactivity with LH, 131
- Biological activity of HCG, ability of antisera produced by Pr-β-HCG-TT to neutralize (goat, monkey), 171
- Blood loss, Cu-IUD insertion immediately following abortion, 707
- Centchroman, 3,4-trans-2,2-dimethyl-3-phenyl-4-(p-(β-pyrrolidinoethoxy)-phenyl)-7-methoxy chroman hydrochloride
- Centchroman,
 - effect of estradiol and progesterone uptake by different tissues (rat), 665
 - nature of estrogenic and anti-estrogenic actions on uterus, 597
- Cerebral cortex, binding of estradiol (guinea pig), 407

CONTRACEPTION

- Cervix, effect of IUDs on estradiol and progesterone uptake (monkey), 355
- Chemicals locally applied, efficacy as contragestational agents (rat), 571
- Chlormadinone diacetate, continuous, effect on maintenance of lactation, 313
- α -chlorohydrin, dl-3-chloro-1,2-propanediol
- α -chlorohydrin, antifertility studies in male (rat), 639
- dominant lethal mutation studies in male (rat), 639
- Chronoperiodicity in response to intra-amniotic PGF₂ α , 95
- Clinical performance of Cu-T IUD, effect of copper surface area, 715
- Clinical profile studies, immunization with Pr- β -HCG-TT, 253
- Conception cohorts, utilization for evaluation of family planning programs, 515
- Contraceptive agent, investigation of Danazol, 619
- Contraceptive hormonal therapies, effect on oral glucose tolerance test, 299
- Contragestational agents, efficacy of various locally applied chemicals (rat), 571
- Contrast pressure technique for female sterilization, 547
- Copper 7 and Dalkon Shield, comparative study, 31
- Copper devices, cytological follow-up, 739
- durability, 7
- mechanism of action, 7
- secondary effects, 7
- Copper surface area, effect on clinical performance of Cu-bearing T IUD, 715
- Copper T-200 and Silicone Shell loop D, randomized study in parous women, 365
- Copper treated endometrium, glycolytic metabolism, 17
- Copper-coated duplex wires, IUD (rat), 55
- Copper-T IUD, effect on uptake of estradiol and progesterone (monkey), 355
- uterine perforation and removal by laparoscopy, 47
- Cu 7-TM, examination by scanning electron microscopy, 65
- Cu7 200 device, four years experience, 7
- Cu-7, cytological follow-up, 739
- Cu-IUD, effect of post-abortion insertion, 707
- Cu-T 200, glycolytic metabolism in endometrium, 17
- uterine perforation and removal by laparoscopy, 47
- Cu-T IUD, copper surface area and clinical performance, 715
- Cytological follow-up, copper IUDs, 739
- Cytosol of cerebral cortex, binding sites and Ka for estradiol (guinea pig), 407
- Dalkon Shield, examination by scanning electron microscopy, 65
- Dalkon Shield and copper 7, comparative study, 31
- Danazol, investigation as a contraceptive agent, 619

CONTRACEPTION

- Delayed implantation, oestrogen synthesis (rat), 101
- Diabetic oral glucose tolerance test, effect of various contraceptive hormonal therapies, 299
- Dinitrophenyl derivatives of β -subunit of HCG, immunological properties (mouse, rabbit, monkey), 141
- Dominant lethal mutation studies in male, α -chlorohydrin (rat), 639
- Duplex (copper-coated) wires, IUD (rat), 55
- Endocrine functions, effect of immunization with Pr- β -HCG-TT vaccine (monkey), 201
- Endolymphatic stromal myosis, progestagen therapy, 1
- Endometrial alkaline phosphatase, role in mechanism of action of IUD (rat), 731
- Endometrium, glycolytic metabolism with Cu-T 200, 17
- Endouterine copper in fertility control, mechanism of action, 7
- Estradiol, binding by cerebral cortex (guinea pig), 407
- Estradiol uptake, effect of intrauterine T-device and copper-T (monkey), 355
- Estradiol uptake by different tissues, effect of centchroman (rat), 665
- Estrogenic actions of centchroman on uterus (rat), 597
- 17 α -Ethynyl-oestr-4-en-17 β -ol, lynestrenol
- Evaluation of family planning programs, utilization of conception cohorts, 515
- Family planning, research training in developing countries, 469
- Family planning programs, utilization of conception cohorts, 515
- Female sterilization, contrast pressure technique, 547
- Fertility regulation, potentials at tubal level, 447
- First trimester abortion,
 use of 15-me-F₂ α -me-ester vaginal suppositories, 87
 use of vaginal silastic device with 15-ME-PGF₂ α , 697
- Glycolytic metabolism in endometrium, Cu-T 200, 17
- Gray-scale sonography and IUD, 489
- HCG, human chorionic gonadotropin
- HCG, ability of antibodies of Pr- β -HCG-TT to neutralize biological activity (goat, monkey), 171
- HCG injections, influence on antibody titer when immunized with Pr- β -HCG-TT, 245
- Hepatotoxic effects, guidelines for assessment in male antifertility agents, 461
- Hormones, immunological reactivity of antibodies of Pr- β -HCG-TT (monkey, goat), 163
- Human reproduction, research training in developing countries, 469
- Hypersensitivity reactions, immunization with Pr- β -HCG-TT (monkey), 231
- Immune responses, effect of combined oral contraceptive pill, 417

CONTRACEPTION

- Immunological methods to prevent pregnancy, editorial comment, 125
- Immunological properties of dinitrophenyl derivatives of β -subunit of HCG (mouse, rabbit, monkey), 141
- Immunological reactivity with different hormones, antibodies of Pr- β -HCG-TT (monkey, goat), 163
- Implantation, delayed, effect on oestrogen synthesis (rat), 101
- Implants, megestrol acetate, influence on ovarian function, 685
levels in plasma, 685
- Injectable sustained release fertility control system (rat), 375
- Intramuscular methyl PGE₂ and laminaria, midtrimester abortion, 723
- Intramuscular 15-methyl PGF₂ α , abortion of early gestation, 319
- Intratubal silastic spheres, medicated (rabbit), 497
- Intravaginal device, IVD
- Intravaginal Silastic ring, medroxyprogesterone acetate, 605
- IUD,
 - comparison of Dalkon Shield and Gravigard, 31
 - copper devices, cytological follow-up, 739
 - copper surface area and clinical performance of Cu-T IUD, 715
 - copper T-200 and Silicone Shell loop D, randomized study in parous women, 365
 - Cu7 200 device, four years experience, 7
 - Cu-IUD insertion immediately following abortion, 707
 - Cu-T 200, glycolytic metabolism in endometrium, 17
 - Cu-T 200, uterine perforation, 47
 - duplex (copper-coated) wires (rat), 55
 - examination by scanning electron microscopy, 65
 - experience with uterine progesterone system, 559
 - gray-scale sonography, 489
 - d-norgestrel-releasing T-device, 503
 - role of endometrial alkaline phosphatase in mechanism of action (rat), 731
 - T-device and copper-T, effect on uptake of estradiol and progesterone (monkey), 355
- IVD, intravaginal device
- IVD, medroxyprogesterone acetate, 605
- Kinetics of antibody response in animals, Pr- β -HCG-TT, 153
- Lactation, maintenance, effect of continuous chlormadinone diacetate, 313
- Laminaria and methyl PGE₂, midtrimester abortion, 723
- Laparoscopic tubal sterilization, long-term postoperative follow-up, 631
- Levels of megestrol acetate in plasma, megestrol acetate implants, 685
- LH, luteinizing hormone
- LH cross-reactivity, processing of β -subunit of HCG to minimize, 131

- Lippes loop D, examination by scanning electron microscopy, 65
- Log-rank method of life-table analysis, copper T-200 and Silicone Shell loop D, 365
- LRH, luteinizing hormone-releasing hormone
- LRH analogs, anti-ovulatory/anti-pregnancy effects (rat), 341
- Luteinizing hormone-releasing hormone, LRH
- Lynestrenol, 17 α -ethinyl-oestr-4-en-17- β -ol
- Lynestrenol, effect on oestrogens and progesterone during menstrual cycle (monkey), 677
- Male antifertility agents, guidelines for assessment of potential hepatotoxic effects, 461
- 15-Me-F₂ α -me-ester, 15(S) 15-methyl-prostaglandin F₂ α -methyl ester
- 15-Me-F₂ α -me-ester, vaginal suppositories, first trimester abortion, 87
- 15-ME-PGF₂ α , 15(S)-15-methyl-prostaglandin F₂ α methyl ester
- 15-ME-PGF₂ α , vaginal silastic device, abortifacient effects, 697
- Mechanism of action, endouterine copper, 7
- Mechanism of action of IUD, role of endometrial alkaline phosphatase (rat), 731
- Medroxyprogesterone acetate, intravaginal Silastic ring, 605
- Megestrol acetate implants, influence on ovarian function, 685 levels in plasma, 685
- Menstrual cycle, effect of lynestrenol on oestrogens and progesterone (monkey), 677
- Metabolic functions, effect of immunization with Pr- β -HCG-TT vaccine (monkey), 201
- Methyl PGE₂, 15(S)-15 methyl prostaglandin E₂
- Methyl PGE₂ and laminaria, midtrimester abortion, 723
- 15-Methyl PGF₂ α , 15-methyl prostaglandin F₂ α
- 15-Methyl PGF₂ α , intramuscular, abortion of early gestation, 319
- 15(S)-15 Methyl prostaglandin E₂, methyl PGE₂
- 15-Methyl prostaglandin F₂ α , 15-methyl PGF₂ α
- 15(S)-15-Methyl-prostaglandin F₂ α methyl ester, 15-ME-PGF₂ α
- 15(S) 15-Methyl-prostaglandin F₂ α -methyl ester, 15-me-F₂ α -me-ester
- Microbial sterility, Pr- β -HCG-TT, 183
- Midtrimester abortion, methyl PGE₂ and laminaria, 723
- Norethisterone, injectable sustained release system (rat), 375
- d-Norgestrel, subcutaneous implants, 287
- d-Norgestrel-releasing IUD, 503
- d-Norgestrel-releasing IUD, plasma concentration of estradiol, 503 plasma concentration of d-norgestrel, 503 plasma concentration of progesterone, 503
- Oestradiol, inhibition of positive feedback, subcutaneous implants of d-norgestrel, 287
- Oestrogen synthesis during delayed implantation (rat), 101

CONTRACEPTION

- Oestrogens, effect of lynestrenol during menstrual cycle (monkey), 677
- Oral contraceptives,
 - effect on oral glucose tolerance test, 299
 - self-prescription, 333
 - uterine response to PGE₂, 749
- Oral contraceptive pill, combined, some immune responses, 417
- Oral contraceptive steroids, effect on pituitary prolactin secretion, 79
- Oral glucose tolerance test, effect of various contraceptive hormonal therapies, 299
- Organ functions, effect of immunization with Pr- β -HCG-TT vaccine (monkey), 201
- Ova, transport, 447
- Ovarian function,
 - effect of lynestrenol (monkey), 677
 - effect of megestrol acetate implants, 685
- PGE₂, prostaglandin E₂
- PGE₂, uterine response under oral contraceptives, 749
- PGF₂ α , prostaglandin F₂ α
- PGF₂ α , attempted abortion of abdominal pregnancy, 385
- PGF₂ α , intraamniotic, chronoperiodicity in response, 95
- Pharmacological studies, Pr- β -HCG-TT (mouse, rat), 189
- Pharmacopoeial safety, Pr- β -HCG-TT, 183
- (D-Phe²)-LRH analogs, anti-ovulatory/anti-pregnancy effects (rat), 341
- Pituitary prolactin secretion, effects of oral contraceptive steroids, 79
- Post-partum contraception, maintenance of lactation by continuous chlormadinone diacetate, 313
- Postoperative follow-up, laparoscopic tubal sterilization, 631
- Pr- β -HCG-TT, processed β -HCG conjugated to tetanus toxoid
- Pr- β -HCG-TT,
 - ability of antibodies to neutralize HCG (goat, monkey), 171
 - acute toxicity studies (mouse, rat), 189
 - antibody response, 237
 - clinical profile studies of immunization, 253
 - hypersensitivity reactions of immunization (monkey), 231
 - immunological reactivity of antibodies with different hormones (monkey, goat), 163
 - influence of HCG and tetanus toxoid injections on antibody titers, 245
 - kinetics of antibody response in animals, 153
 - microbial sterility, 183
 - pharmacological studies (mouse, rat), 189
 - pharmacopoeial safety, 183
 - pyrogens, 183
 - screening for autoantibodies, 225
 - survival of animals (mouse, rabbit, monkey), 195
 - toxicology studies of immunization, 253

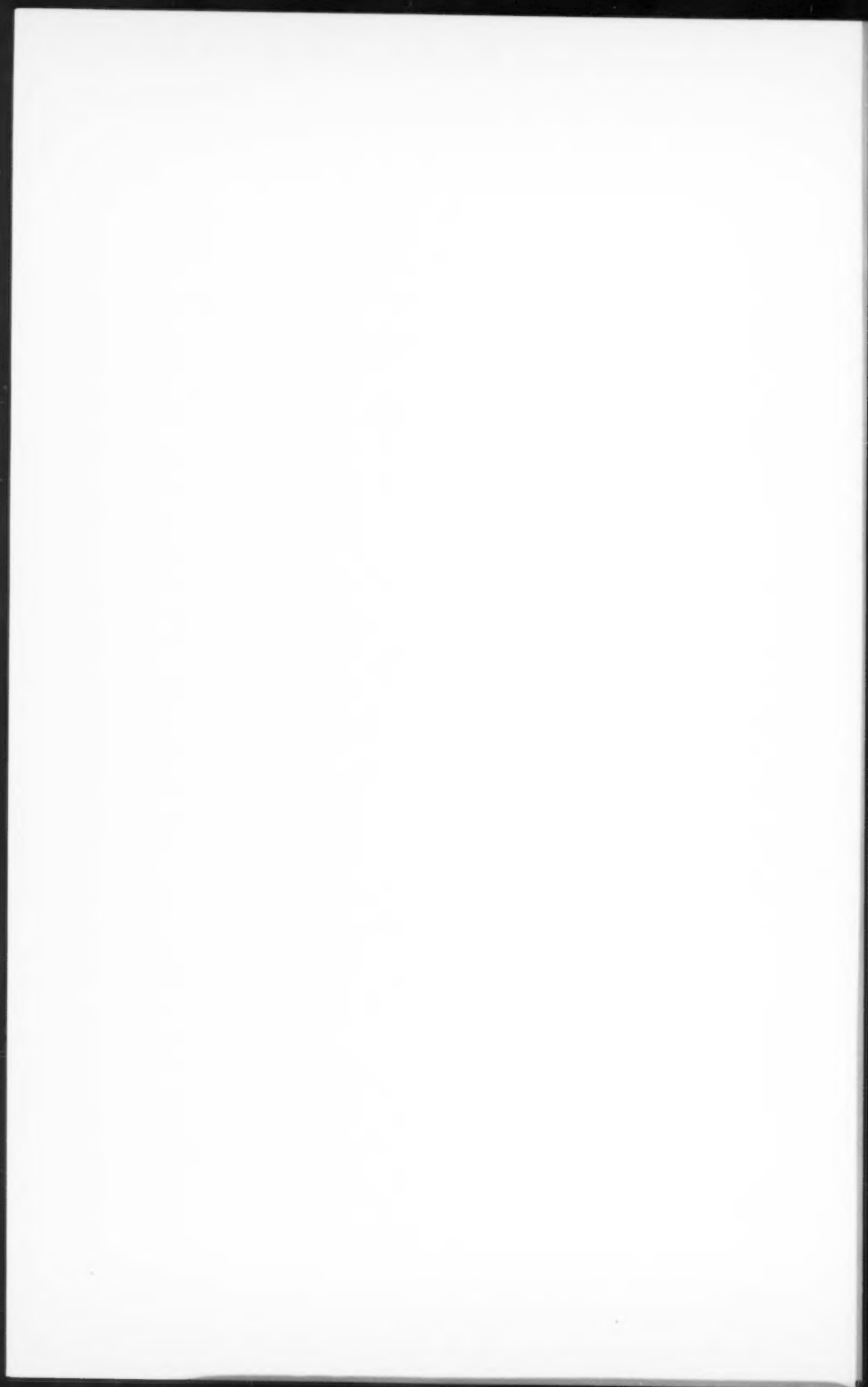
- Pr- β -HCG-TT immunization,
 - autopsy report (monkey), 213
 - effect on endocrine functions (monkey), 201
 - effect on metabolic functions (monkey), 201
 - effect on organ functions (monkey), 201
- Processed β -HCG conjugated to tetanus toxoid, Pr- β -HCG-TT
- Progestagen therapy, endolymphatic stromal myosis, 1
- Progesterone, effect of lynestrenol during menstrual cycle (monkey), 677
- Progesterone uptake, effect of intrauterine T-device and copper-T (monkey), 355
- Progesterone uptake by different tissues, effect of centchroman (rat), 665
- Progesterone-releasing IUD, clinical experience, 559
- Prolactin secretion, effects of oral contraceptive steroids, 79
- Prostaglandin,
 - chronoperiodicity in response to intra-amniotic PGF₂ α , 95
 - intramuscular 15-methyl PGF₂ α , abortion of early gestation, 319
 - 15-me-F₂ α -me-ester vaginal suppositories for first trimester abortion, 87
 - 15-ME-PGF₂ α , vaginal silastic device for first trimester abortion, 697
 - methyl PGE₂ and laminaria, midtrimester abortion, 723
 - PGE₂, uterine response under oral contraceptives, 749
 - PGF₂ α , attempted abortion of abdominal pregnancy, 385
- Prostaglandin E₂, PGE₂
- Prostaglandin F₂ α , PGF₂ α
- Pyrogens, Pr- β -HCG-TT, 183
- Regulation of reproduction, history of Western civilization, 427
- Reproduction, concepts, history of Western civilization, 427
- Reproduction, concepts and regulation,
 - early modern period, 427
 - Graeco-Roman antiquity, 427
 - medieval period, 427
 - nineteenth century, 427
- Research training in reproduction and family planning in developing countries, 469
- Scanning electron microscopy, IUDs, 65
- Screening for autoantibodies, immunization with Pr- β -HCG-TT, 225
- Self-prescription of oral contraceptives, 333
- Serum prolactin (PRL), effects of oral contraceptive steroids, 79
- Silastic medicated spheres, intratubal (rabbit), 497
- Silicone Shell loop D and copper T-200, randomized study in parous women, 365
- Spermatogenesis, effect of subdermal testosterone implants (monkey), 583

CONTRACEPTION

- Spermatozoa, transport, 447
- Spheres, medicated intratubal silastic (rabbit), 497
- Sterilization,
 - female, contrast pressure technique, 547
 - laparoscopic tubal, long-term postoperative follow-up, 631
- Subcutaneous implants, d-norgestrel, 287
- Subcutaneous implants of d-norgestrel, inhibition of positive feedback of oestradiol, 287
- Subdermal implants, testosterone, effect on spermatogenesis (monkey), 583
- Surface area of copper, effect on clinical performance of Cu-bearing T IUD, 715
- Survival of animals injected with Pr- β -HCG-TT (mouse, rabbit, monkey), 195
- Sustained release fertility control system, injectable norethisterone (rat), 375
- T-configuration IUD, experience with uterine progesterone system, 559
- T-device,
 - effect on uptake of estradiol and progesterone (monkey), 355
 - d-norgestrel-releasing, 503
- Tamoxifen, ICI 46, 474; trans-1(p- β -dimethylaminoethoxyphenyl)-1-2-diphenyl but-1-ene
- Tamoxifen, effect on oestrogen synthesis during delayed implantation (rat), 101
- TCu 200, examination by scanning electron microscopy, 65
- TCu 220C, examination by scanning electron microscopy, 65
- TCu-200 L, cytological follow-up, 739
- Testicular function, effect of subdermal testosterone implants (monkey), 583
- Testosterone, subdermal implants, effect on spermatogenesis (monkey), 583
- Tetanus toxoid injections, influence on antibody titer when immunized with Pr- β -HCG-TT, 245
- Tissues, effect of centchroman on uptake of estradiol and progesterone (rat), 665
- Toxicity studies, Pr- β -HCG-TT (mouse, rat), 189
- Toxicology studies, immunization with Pr- β -HCG-TT, 253
- 3,4-Trans-2,2-dimethyl-3-phenyl-4-(p-(β -pyrrolidinoethoxy)-phenyl)-7-methoxy chroman hydrochloride, centchroman
- Tubal environment, 447
- Tubal environment,
 - effect on embryo, 447
 - influence on spermatozoa, 447
- Tubal fluid, enzyme inhibitors, 447
- Tubal level, potentials for fertility regulation, 447
- Tubal transport mechanisms, 447
- Uterine perforation, Cu-T 200, case report, 47
- Uterine progesterone system, clinical experience, 559

CONTRACEPTION

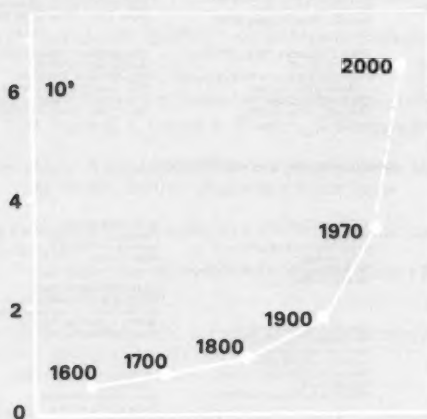
- Uterine response to PGE₂ under oral contraceptives, 749
- Uterus,
 - effect of IUDs on estradiol and progesterone uptake (monkey), 355
 - nature of estrogenic and anti-estrogenic actions of centchroman (rat), 597
- Vacuum aspiration abortion, Cu-IUD insertion immediately following, 707
- Vaginal contraceptive preparations,
 - relationships of in vivo data to in vitro end points (rabbit), 479
 - relative antifertility activity (rabbit), 479
- Vaginal silastic device, 15-ME-PGF₂α for first trimester abortion, 697
- Vaginal suppositories of 15-me-F₂α-me-ester, first trimester abortion, 87



Vol. 14 1976
JULY-DECEMBER

CONTRACEPTION

AN INTERNATIONAL JOURNAL



DANIEL R. MISHELL, Jr., M.D. — Editor

Publisher: GERON-X, INC., LOS ALTOS, CALIF.

BOARD OF ASSOCIATE EDITORS

Wendy Baldwin, Ph.D.
Behavioral Sciences Branch
Center for Population Research
National Institute of Child Health
and Human Development
Bethesda, Maryland 20014

Gerald S. Bernstein, Ph.D., M.D.
Associate Professor
Department of Obstetrics and
Gynecology
USC School of Medicine
Los Angeles, California 90033

M. C. Chang, Ph.D., Sc.D.
Senior Scientist
Worcester Foundation for
Experimental Biology
Shrewsbury, Massachusetts 01545

Philip A. Cortman, M.D.
Director of Population Research
National Institute of Child Health
and Human Development
Bethesda, Maryland 20014

Uwe Goebelsmann, M.D.
Director of the Reproductive
Endocrinology Laboratory
Women's Hospital
1240 North Mission Road
Los Angeles, California 90033

Joseph W. Goldzieher, M.D.
Director, Division of Clinical
Sciences
Southwest Foundation for
Research and Education
San Antonio, Texas

Roy O. Greep, Ph.D.
Director
Laboratory of Human Reproduc-
tion & Reproductive Biology
Harvard Medical School
45 Shattuck Street
Boston, Massachusetts 02115

Roy Hertz, M.D., Ph.D.
Research Professor
Departments of Pharmacology
and Obstetrics and Gynecology
George Washington University
Medical Center
Washington, D.C. 20037

Anrudh K. Jain, Ph.D.
Assistant Professor
The Population Council
Biomedical Division
The Rockefeller University
York Avenue & 66th Street
New York, N.Y. 10021

William D. Odell, M.D.
Professor and Chairman
Department of Medicine
Harbor General Hospital
U.C.L.A. School of Medicine
Torrance, California 90509

C. Alvin Paulsen, M.D.
Professor of Medicine
Department of Medicine
University of Washington
School of Medicine
Seattle, Washington 98114

John J. Sciarra, M.D., Ph.D.
Chief of Staff
Premise Women's Hospital and
Maternity Center
233 East Superior St.
Chicago, Illinois 60611

Sheldon Segal, Ph.D.
Director, Bio-Medical Division
The Population Council
Rockefeller University
York Avenue and 66th Street
New York, New York 10021

Sidney Shulman, Ph.D.
Professor and Chairman
Department of Microbiology
New York Medical College
Fifth Avenue at 106th Street
New York, New York 10029

Anna L. Southam, M.D.
Program Officer
International Division-Population
The Ford Foundation
320 East 43rd Street
New York, New York 10017

William N. Spellacy, M.D.
Professor and Chairman
Department of Obstetrics and
Gynecology
The University of Florida
College of Medicine
Gainesville, Florida 32610

Howard J. Tatum, Ph.D., M.D.
Associate Director
Biomedical Division
The Population Council
The Rockefeller University
New York, New York 10021

Christopher Tietze, M.D.
Associate Director
Bio-Medical Division
The Population Council
2 East 103rd Street
New York, New York 10029

Corresponding Editors for CONTRACEPTION

Elisamar Coutinho, M.D.
Professor
Department of Biochemistry and
Obstetrics
University of Bahia
Salvador, Bahia, BRAZIL

P. Giorgio Crosignani, M.D.
Professor Incaricato di
Endocrinologia Ginecologica
alla Facoltà di Medicina
Dell'Università di Milano
20122 Milano, ITALY
Via Comenda 12

Egon Dietzfelusy, M.D.
Professor
Reproductive Endocrinology
Research Unit
Swedish Medical Research Council
Karolinska Sjukhuset
Stockholm 60, SWEDEN

J. Ferin, M.D.
Professor
Physiology of Human Reproduction
Research Unit
University of Louvain Hospital
Louvain, BELGIUM

Carlos Gual, M.D.
Instituto Nacional de la Nutrición
Hospital de Enfermedades de la
Nutrición
Av. San Fernando y
Viaducto Tlalpan
MEXICO 22, D.F., MEXICO

I. Halbrecht, M.D.
Professor
Department of Obstetrics and
Gynecology
Tel Aviv University Medical School
Tel Aviv, ISRAEL

Prof. Dr. J. Hammerstein
Abt. Gynaek. Endokrinologie
Sterilität und Familienplanung
Freie Universität Berlin
Hindenburgdamm 30
1000 Berlin 45
FEDERAL REPUBLIC GERMANY

Professor Doctor A. A. Haspels
Department of Obstetrics and
Gynecology
Academic Hospital
University of Utrecht
Catharinesingel 101
Utrecht, NETHERLANDS

Tapani Luukkainen, M.D.
Steroid Research Laboratory
University of Helsinki
Department of Medical Chemistry
Kuvopuenteper 10 A
SF-00170 Helsinki 17, FINLAND

John R. Newton, M.B.
Department of Obstetrics and
Gynecology
King's College Hospital Medical
School
University of London
Denmark Hill
London, SE5 8RX
ENGLAND

Dr. M. R. N. Prasad
Professor of Zoology
University of Delhi
Delhi 7, INDIA

Dr. (Mrs.) Shanta S. Rao
Reproductive Physiology Unit
Indian Council of Medical Research
Seth G. S. Medical College
Parel, Bombay 12, INDIA

Rodney P. Shearman
Professor of Obstetrics and
Gynecology
The University of Sydney
Sydney 2006, NSW
AUSTRALIA

Sabita Tejija, M.D.
Deputy Director General
Contraceptive Testing Unit
Indian Council of Medical Research
Ansair Nagar
Post Box 4506
New Delhi-110016
INDIA

Martin P. Vessey, M.D.
Professor, University Department of
Social and Community Medicine
University of Oxford
8 Kabie Road
Oxford, OX1 3QN
ENGLAND

Juan Zanartu, M.D.
Associate Professor
Department of Experimental
Fertility
Universidad de Chile Clínica
Obstetrica
Hospital "Jose Joaquin Aguirre"
Casilla 6637
Santiago, CHILE

CONTRACEPTION

July 1976

Volume 14, Number 1

Elevation of Serum Prolactin during Application of Oral Contraceptives J. S. E. Dericks-Tan and H.-D. Taubert	1
Influences of Copper and Design of Intrauterine Devices on Endometrial Bleeding in Monkeys S. T. Shaw, Jr., R. V. Forino, C. H. Poon and D. L. Moyer	9
Release of Microquantities of Cyproterone Acetate from Subcutaneous Silastic Capsules: Failure to Produce an Antifertility Effect David J. Back and John C. Shenton	17
Copper Release from Copper-T Intrauterine Devices Henri Timonen	25
Blastocidal and Contraceptive Actions by an Extract and Compounds from Endod (<i>Phytolacca dodecandra</i>) S. J. Stolzenberg, R. M. Parkhurst and E. J. Reist	39
Effects of Prostaglandin E ₂ (PGE ₂) on the Male Reproductive System E. C.-F. Tso	53
Cinematographic Study with Extra-Amniotic Injection of 15-Me-PGF _{2α} N. Agarwal, L. Saraya, R. Bhadury, S. Bhargava and V. Hingorani	61
Loop Vs. Shield: A Competing Risks Analysis of IUD Termination Jay Herson, Cyril L. Crocker and Ernest Butts	67
Clinical Evaluation of Quinacrine Hydrochloride for Sterilization of the Human Female Charanpat Israngkun, Sukhit Phaosavadi, Robert S. Neuwirth and Ralph M. Richart	75
Plasma Levels of d-Norgestrel, Estradiol and Progesterone during Treatment with Silastic Implants Containing d-Norgestrel E. Weiner and E. D. B. Johansson	81
Preoperative Cervical Dilatation by Small Doses of Prostaglandin F _{2α} R. Andriess, H. T Hart and A. A. Haspels	93
Current Bibliographic Index of Mammalian Reproduction. LXXXVII Julius S. Greenstein	101

CONTRACEPTION

August 1976

Volume 14, Number 2

Continuous Oral Low-Dosage Cyproterone Acetate for Fertility Regulation in the Male? A Trend Analysis in 15 Volunteers U. J. Koch, F. Lorenz, K. Danehl, R. Ericsson, S. H. Hasan, D. v. Keyserlingk, K. Lübke, M. Mehring, A. Römmeler, U. Schwartz and J. Hammerstein	117
The Effect of an Oral Contraceptive on the Pulmonary Functions A. R. El Heneidy, Y. Gemei, A. E. Abdel-Latif and H. K. Topozada	137
Bio-Availability and Pharmacokinetics of Cyproterone Acetate- ¹⁴ C and Ethinyloestradiol- ³ H after Oral Administration as a Coated Tablet (SH B 209 AB) U. Speck, H. Wendt, P. E. Schulze and D. Jentsch	151
A Three-Year Study of the Copper T 200 Intrauterine Device H. D. Gupta, P. K. Devi and I. Gupta	165
Dose-Dependent Inhibition by Oral Contraceptives of the Pituitary to Release LH and FSH in Response to Stimulation with LH-RH J. S. E. Dericks-Tan, W. Krög, K. Aktories and H.-D. Taubert	171
Effects of Cyproterone Acetate on Associations of Spermatozoa and Seminal Vesicles in the Guinea Pig Shirley Mura McGlinn, Benjamin A. Shepherd and Jan Martan	183
A Suggested Set of Working Definitions and Criteria Applicable to Interruption of Pregnancy J. J. Amy, M. Thiery, M. Bygdeman, T. D. Kerenyi, J. S. Crawford and S. M. M. Karim	193
A Study of Glucose Tolerance, Serum Transaminase and Lipids in Women Using Depot-Medroxyprogesterone Acetate and a Combination-Type Oral Contraceptive Monthira Tankeyoon, Nikorn Dusitsin, Vichai Poshyachinda and Ulf Larsson-Cohn	199
Plasma Levels of d-Norgestrel and Ovarian Function in Women Using Intravaginal Rings Impregnated with dl-Norgestrel for Several Cycles A. Victor and E. D. B. Johansson	215
Current Bibliographic Index of Mammalian Reproduction. LXXXVIII Julius S. Greenstein	227

CONTRACEPTION

September 1976

Volume 14, Number 3

Endometrial Morphology with Copper-Bearing Intrauterine Devices Chih Hsu, Alex Ferenczy, Ralph M. Richart and Katherine Darabi	243
Bioavailability of Contraceptive Steroids from Capsules K. Fotherby and R. J. Warren	261
A Comparison of Steerable and Rigid Hysteroscopy for Uterine Visualization and Cannulation of Tubal Ostia Charles M. March and Robert Israel	269
Contraceptive Efficacy of Once-Weekly Oral Administration of 2.5 Mg R 2323 E. Sakiz, G. Azadian-Boulanger, T. Ojasoo and F. Laraque	275
Tubal Migration of a Lippes Loop with Subsequent Intrauterine Pregnancy Mahasara Gunaratne	285
Effect of a Long-Acting Contraceptive Drug, Norethindrone Enanthate, on Serum Zinc and Copper in Human Volunteers C. G. Funckes, M. Chvapil, R. W. Carrol and R. Bressler	291
Biochemical Basis for the "Riboflavin Defect" Associated with the Use of Oral Contraceptives. A Study in Female Rats Faizy Ahmed and Mahtab S. Bamji	297
Vitamin Supplements to Women Using Oral Contraceptives (Studies of Vitamins B ₁ , B ₂ , B ₆ and A) Faizy Ahmed and Mahtab S. Bamji	309
Pharmacokinetic Observations on Medroxyprogesterone Acetate Administered Orally and Intravaginally Arne Victor and Elof D. B. Johansson	319
Effect of Copper Ionization of the Cervix on Sperm Migration S. K. Chattopadhyay, J. M. Ahuja and S. D. Khanna	331
Plasma Levels of Medroxyprogesterone Acetate (MPA), Estradiol and Progesterone in the Rhesus Monkey after Intramuscular Administration of Depo-Provera® Gabriel Mora and Elof D. B. Johansson	343
Current Bibliographic Index of Mammalian Reproduction. LXXXIX Julius S. Greenstein	351
Announcement	366

CONTRACEPTION

October 1976

Volume 14, Number 4

Menstrual Regulation and Early Pregnancy Termination Performed by Paraprofessionals under Medical Supervision Richard J. Scotti and Harvey L. Karman	367
Interception: Post-Coital Estrogens in 3016 Women A. A. Haspels	375
Intravas Device Studies in Rabbits: I. Effect of Surgical Procedures on Adrenergic Innervation of the Vas Deferens J. P. Polidoro, L. A. Kraft and R. M. Culver	383
Diagnosis of Early Pregnancy in the Baboon A. A. Shaikh, C. Allen-Rowlands, T. Dozier, D. C. Kraemer and J. W. Goldzieher	391
Effects of Cyproterone Acetate on Reproductive Functions in Normal Human Males Somnath Roy, Sudha Chatterjee, M. R. N. Prasad, A. K. Poddar and D. C. Pandey	403
RNA Metabolism of the Normal and the Copper Treated Human Endometrium Omar Hernández Pérez, Ramón Aznar, Luz M. Ballesteros, J. Domingo Méndez and Adolfo Rosado	421
Use of the Fluid-Filled Tecna Devoice in Ljubljana, Yugoslavia Lidija Andolsek and Michael Thomas	435
The Possible Mode of Action of Prostaglandins: XI. Clomiphene Citrate and the Reversal of Luteolytic or Abortifacient Efficacy of Prostaglandin F _{2a} in Rats Amar Chatterjee	447
Failure of Indomethacin in Limiting the Fertilizing Capacity of the Epididymal Spermatozoa in Rats Amar Chatterjee	455
Medroxyprogesterone Acetate, Estradiol, FSH and LH in Peripheral Blood after Intramuscular Administration of Depo-Provera® to Women S. Jeppsson and E. D. B. Johansson	461
Current Bibliography of Mammalian Reproduction. XC Julius S. Greenstein	471

CONTRACEPTION

November 1976

Volume 14, Number 5

Post-Implantation Termination of Pregnancy in Rats B. G. Steinetz, M. C. Butler, W. K. Sawyer, E. M. O'Byrne and T. Giannina	487
Calcareous Deposits Formed on IUDs in Human Exposures A. B. Johnson, Jr., R. F. Maness and R. G. Wheeler	507
Evaluation of 15(S) 15 Methyl-PGF _{2α} Methyl Ester Suppositories with a Two Dose Schedule for Termination of Early Pregnancy B. Zoremthangi, N. Agarwal, C. P. Puri, K. R. Laumas and V. Hingorani	519
The Influence on the Pituitary-Ovarian Function, Cervical Mucus and Vaginal Cytology of a New Progestational Compound Sven Olaf Skouby	529
Second Trimester Abortion with Intramuscular Injections of 15-Methyl Prostaglandin F _{2α} Charles A. Ballard and Laura Slaughter	541
Contraception with d-Norgestrel Silastic Rods. Plasma Levels of d-Norgestrel and Influence on the Ovarian Function Erik Weiner and Elof D. B. Johansson	551
Plasma Levels of d-Norgestrel after Oral Administration Erik Weiner, Arne Victor and Elof D. B. Johansson	563
Spermicidal Potential of Saponins Isolated from Indian Medicinal Plants B. S. Setty, V. P. Kamboj, H. S. Garg and N. M. Khanna	571
Immunization with Hapten-Coupled hCG-β Subunit and Its Effect on the Menstrual Cycle A. Pala, M. Ermini, L. Carenza and G. Benagiano	579
Current Bibliographic Index of Mammalian Reproduction. XCI Julius S. Greenstein	595

CONTRACEPTION

December 1976

Volume 14, Number 6

Steroid Contraceptives in Non-Human Primates (I). Metabolic Fate of Synthetic Estrogens in the Baboon <i>before</i> Exposure to Oral Contraceptives B. D. Kulkarni	611
Anti-Fertility Effects of an Analog of Luteinizing Hormone Releasing Hormone (LHRH) in Rats Ronald R. Humphrey, Barbara L. Windsor, Ferris G. Bousley and Richard A. Edgren	625
Preoperative Cervical Dilatation by Oral PGE ₂ A. S. van den Bergh, E. Szabo and F. E. Szontágh	631
The Effectiveness in Rhesus Monkeys of an Antifertility Vaccine Based on Neutralization of Chorionic Gonadotropin K. Sundaram, C. C. Chang, K. A. Laurence, A. O. Brinson, L. E. Atkinson, S. J. Segal and D. N. Ward	639
A Statistical Study of the Copper T and Copper 7 Intrauterine Devices H. D. Gupta, M. I. Belavalgidad, I. Gupta and P. K. Devi	655
Evaluation of 15(S)15-Methyl-PGF _{2α} -Methyl Ester Vaginal Suppositories for Cervical Dilatation and Second Trimester Pregnancy Termination Usha R. Krishna, Veena Mhatre, A. C. Ganguli and V. N. Purandare	661
Intravaginal Contraception with the Synthetic Progestin, R2323 Oladele Akinla, Pekka Lähteenmäki and Theodore M. Jackanicz	671
Comparative Study of the Estrogenic Effect of Ethinylestradiol and Mestranol on the Endometrium I. A. Brosens and R. Pijnenborg	679
A Study of Four Antigon Models and Factors in the Use-Effectiveness of the IUD Jörgen Wiese	687
Announcement	703
Current Bibliography of Mammalian Reproduction. XCII Julius S. Greenstein	705
Author Index for Volume 14	721
Subject Index for Volume 14	723

INDEX TO VOLUME 14

AUTHOR INDEX

- Abdel-Latif, A.E., 137
 Agarwal, N., 61, 519
 Ahmed, F., 297, 309
 Ahuja, J.M., 331
 Akinla, O., 671
 Aktories, K., 171
 Allen-Rowlands, C., 391
 Amy, J.J., 193
 Andolsek, L., 435
 Andriesse, R., 93
 Atkinson, L.E., 639
 Azadian-Boulanger, G., 275
 Aznar, R., 421
 Back, D.J., 17
 Ballard, C.A., 541
 Ballesteros, L.M., 421
 Bamji, M.S., 297, 309
 Belavalgidad, M.I., 655
 Benagiano, G., 579
 Bhadury, R., 61
 Bhargava, S., 61
 Bousley, F.G., 625
 Bressler, R., 291
 Brinson, A.O., 639
 Brosens, I.A., 679
 Butler, M.C., 487
 Butts, E., 67
 Bygdeman, M., 193
 Carenza, L., 579
 Carrol, R.W., 291
 Chang, C.C., 639
 Chatterjee, A., 447, 455
 Chatterjee, S., 403
 Chattopadhyay, S.K., 331
 Chvapil, M., 291
 Crawford, J.S., 193
 Crocker, C.L., 67
 Culver, R.M., 383
 Danehl, K., 117
 Darabi, K., 243
 Dericks-Tan, J.S.E., 1, 171
 Devi, P.K., 165, 655
 Dozier, T., 391
 Dusitsin, N., 199
 Edgren, R.A., 625
 El Heneidy, E.R., 137
 Ericsson, R., 117
 Ermini, M., 579
 Ferenczy, A., 243
 Forino, R.V., 9
 Fotherby, K., 261
 Funckes, C.G., 291
 Ganguli, A.C., 661
 Garg, H.S., 571
 Gemei, Y., 137
 Giannina, T., 487
 Goldzieher, J.W., 391
 Gunaratne, M., 285
 Gupta, H.D., 165, 655
 Gupta, I., 165, 655
 Hammerstein, J., 117
 Hart, H.'T., 93
 Hasan, S.H., 117
 Haspels, A.A., 93, 375
 Herson, J., 67
 Hingorani, V., 61, 519
 Hsu, C., 243
 Humphrey, R.R., 625
 Israel, R., 269
 Israngkun, C., 75
 Jackanicz, T.M., 671
 Jentsch, D., 151
 Jeppsson, S., 461
 Johansson, E.D.B., 81, 215,
 319, 343, 461, 551, & 563
 Johnson, A.B., Jr., 507
 Kamboj, V.P., 571
 Karim, S.M.M., 193
 Karman, H.L., 367
 Kerenyi, T.D., 193
 Keyserlingk, D.v., 117
 Khanna, N.M., 571
 Khanna, S.D., 331
 Koch, U.J., 117
 Kraemer, D.C., 391
 Kraft, L.A., 383
 Krishna, U.R., 661
 Krög, W., 171
 Kulkarni, B.D., 611
 L&hhteenm&ki, P., 671
 Laraque, F., 275
 Larsson-Cohn, U., 199
 Laumas, K.R., 519
 Laurence, K.A., 639

CONTRACEPTION

INDEX TO VOLUME 14

AUTHOR INDEX (CONTINUED)

- Lorenz, F., 117
 Lübke, K., 117
 Maness, R.F., 507
 March, C.M., 269
 Martan, J., 183
 McGlinn, S.M., 183
 Mehring, M., 117
 Méndez, J.D., 421
 Mhatre, V., 661
 Mora, G., 343
 Moyer, D.L., 9
 Neuwirth, R.S., 75
 O'Byrne, E.M., 487
 Ojasoo, T., 275
 Pala, A., 579
 Pandey, D.C., 403
 Parkhurst, R.M., 39
 Pérez, O.H., 421
 Phaosavadi, S., 75
 Pijnenborg, R., 679
 Poddar, A.K., 403
 Polidoro, J.P., 383
 Poon, C.H., 9
 Poshyachinda, V., 199
 Prasad, M.R.N., 403
 Purandare, V.N., 661
 Puri, C.P., 519
 Reist, E.J., 39
 Richart, R.M., 75, 243
 Römmler, A., 117
 Rosado, A., 421
 Roy, S., 403
 Sakiz, E., 275
 Saraya, L., 61
 Sawyer, W.K., 487
 Schulze, P.E., 151
 Schwartz, U., 117
 Scotti, R.J., 367
 Segal, S.J., 639
 Setty, B.S., 571
 Shaikh, A.A., 391
 Shaw, S.T., 9
 Shenton, J.C., 17
 Shepherd, B.A., 183
 Skouby, S.O., 529
 Slaughter, L., 541
 Speck, U., 151
 Steinetz, B.G., 487
 Stolzenberg, S.J., 39
 Sundaram, K., 639
 Szabo, E., 631
 Szontagh, F.E., 631
 Tankeyoon, M., 199
 Taubert, H.-D., 1, 171
 Thiery, M., 193
 Thomas, M., 435
 Timonen, H., 25
 Toppozada, H.K., 137
 Tso, E.C.F., 53
 van den Bergh, A.S., 631
 Victor, A., 215, 319, 563
 Ward, D.N., 639, 639
 Warren, R.J., 261
 Weiner, E., 81, 551, 563
 Wendt, H., 151
 Wheeler, R.G., 507
 Wiese, J., 687
 Windsor, B.L., 625
 Zoremthangi, B., 519

INDEX TO VOLUME 14

SUBJECT INDEX

- Abortifacient efficacy of $\text{PGF}_{2\alpha}$, reversal by clomiphene citrate (rat), 447
- Abortion,
 - preoperative cervical dilatation with oral PGE_2 , 631
 - second trimester, effect of intramuscular injection of 15-methyl- $\text{PGF}_{2\alpha}$, 541
- Adrenergic innervation, effect of surgical procedures of vas deferens (rabbit), 383
- Amnioglutethimide, interceptive activity (rat), 487
- Analog of LHRH, anti-fertility effects (rat), 625
- Anti-estrogens, interceptive activities (rat), 487
- Anti-fertility effects,
 - des-Gly¹⁰-LHRH-ethylamide (rat), 625
 - LHRH analog (rat), 625
- Antifertility vaccine, neutralization of chorionic gonadotropin (monkey), 639
- Antigen type I IUD, study and use-effectiveness, 687
- Antigen type III IUD, bag model, study and use-effectiveness, 687
- Antigen type IV IUD, wing model, study and use-effectiveness, 687
- Antigon-F IUD, study and use-effectiveness, 687
- β -subunit of hCG, immunization and effect on menstrual cycle, 579
- β -subunit of ovine LH, immunization (monkey), 639
- Bioavailability of contraceptive steroids, capsule vs. tablet formulation, 261
- Bio-availability of cyproterone acetate and ethinyloestradiol after oral administration, 151
- Biochemical basis for "riboflavin defect", use of oral contraceptives (rat), 297
- Blastocidal action, extract and compounds from *Endod* (*Phytolacca dodecandra*) (rat), 39
- Blood urea and hematocrit, effects of cyproterone acetate (male), 403
- Calcareous deposits, formation on IUDs, 507
- Cannulation of tubal ostia, comparison of steerable and rigid hysteroscopes, 269
- Carbohydrate metabolism, effect of DMPA and combination oral contraceptives, 199
- Cervical dilatation,
 - 15-methyl- $\text{PGF}_{2\alpha}$ suppositories, 661
 - preoperative, oral PGE_2 , 631
 - preoperative, use of $\text{PGF}_{2\alpha}$, 93
- Cervical mucus, influence of Org 2969, 529
- Cervix, copper ionisation, effect on sperm migration (rabbit, human), 331
- 1-(p-Chlorobenzoxyl)-5-methoxy-2-methylindol-3-acetic acid, indomethacin

CONTRACEPTION

- Chorionic gonadotropin, effectiveness of antifertility vaccine (monkey), 639
- Cinematographic study, extra-amniotic injection of 15-Me-PGF₂α, 61
- Clinical evaluation of quinacrine hydrochloride for sterilization, 75
- Clomiphene citrate, reversal of PGF₂α action (rat), 447
- Combination oral contraceptive,
 - effect on carbohydrate metabolism, 199
 - d-norgestrel + ethinyl estradiol, plasma level of d-norgestrel, 563
- Competing risks analysis of IUD termination, Loop vs. Shield, 67
- Continuous oral low-dosage cyproterone acetate, fertility regulation (male), 117
- Continuous release of cyproterone acetate from silastic capsules, effect on fertility (male rat), 17
- Contraceptive action, extract and compounds from Endod (Phytolacca dodecandra) (rat), 39
- Contraceptive steroids, bioavailability from capsules orally administered, 261
- Copper, serum levels, effect of norethindrone enanthate, 291
- Copper ionisation of cervix, effect on sperm migration (rabbit, human), 331
- Copper IUD, influence on endometrial bleeding (moneky), 9
- Copper release rate from Cu-T IUD, 25
- Copper T 200 IUD, three-year study, 165
- Copper T and copper 7 IUDs, statistical study, 655
- Copper treated endometrium, RNA metabolism, 421
- Copper-bearing IUDs, endometrial morphology, 243
- Copper-wound IUDs, calcareous deposits, 507
- Cu-T 200 IUD, three-year study, 165
- Cu-T IUD, copper release rate, 25
- Cyproterone acetate,
 - bio-availability and pharmacokinetics after oral administration, 151
 - continuous oral low-dosage for fertility regulation (male), 117
 - effect of microquantities from silastic capsules (male rat), 17
 - effects on associations of spermatozoa and seminal vesicles (guinea pig), 183
 - effects on reproductive functions (male), 403
- Cyproterone acetate, effect on male reproductive functions,
 - blood urea and hematocrit, 403
 - coital frequency and libido, 403
 - general health and physical findings, 403
 - liver function tests, 403
 - penetration of cervical mucus by spermatozoa, 403
 - semen volume and biochemistry, 403
 - sperm count, motility and morphology, 403

- Cyproterone acetate, male fertility regulation,
 - adverse clinical findings, 117
 - changes in biochemistry of seminal plasma, 117
 - changes in sexuality, 117
 - endocrinological changes, 117
 - morphological changes in ejaculate, 117
 - physiological disturbances of spermatozoa, 117
 - toxicological findings, 117
- Dalkon Shield vs. Lippe's Loop, competing risks analysis
 - of termination, 67
- Definitions, applicable to studies on interruption of
 - pregnancy, 193
- Depo-medroxyprogesterone acetate, DMPA
 - effect on carbohydrate metabolism, 199
 - intramuscular injection, effect on peripheral blood
 - levels of MPA, estradiol, FSH and LH, 461
- Des-Gly¹⁰-LHRH-ethylamide, anti-fertility effects (rat),
 - 625
- Design of IUD, influence on endometrial bleeding (monkey),
 - 9
- Diagnosis of early pregnancy (baboon), 391
- Diethylstilbestrol, use in post-coital interception, 375
- DMPA, depo-medroxyprogesterone acetate
- Early pregnancy, diagnosis (baboon), 391
- Endod (*Phytolacca dodecandra*), blastocidal and contra-
 - ceptive actions by extract and purified compounds
 - (rat), 39
- Endometrial bleeding, influences of copper and design
 - (monkey), 9
- Endometrial morphology, copper-bearing IUDs, 243
- Endometrial morphology with copper-bearing IUDs,
 - energy dispersive x-ray analysis, 243
 - light microscopy study, 243
 - scanning electron microscopy study, 243
 - transmission electron microscopy study, 243
- Endometrium,
 - estrogenic effect of ethinylestradiol and mestranol,
 - 679
 - RNA metabolism of normal and copper treated, 421
- Epididymal spermatozoa, effect of indomethacin on
 - fertilizing capacity (rat), 455
- Essential information, applicable to studies on inter-
 - ruption of pregnancy, 193
- Estradiol,
 - peripheral blood level after intramuscular adminis-
 - tration of DMPA, 461
 - plasma level, effect of immunization with hapten-
 - coupled hCG- β subunit, 579
 - plasma level, effect of d-norgestrel silastic rods,
 - 551
 - plasma level, treatment with silastic implants con-
 - taining d-norgestrel, 81

CONTRACEPTION

- Estradiol,
 - plasma level after intramuscular administration of MPA (monkey), 343
- Estrogenic effect of ethinylestradiol and mestranol on endometrium, 679
- Estrogens,
 - interceptive activities (rat), 487
 - synthetic, metabolic fate (baboon), 611
 - use in post-coital interception, 375
- 17 α -Ethinyl-17 β -hydroxy-18-methyl-4,9,11-estrien-3-one, R2323
- 17 α -Ethinyl-18-methyl-11-methylene-4-estren-17 β -ol, ORG 2969
- Ethinylestradiol, use in post-coital interception, 375
- Ethinylestradiol and mestranol, estrogenic effect on endometrium, 679
- Ethinylestradiol, bio-availability and pharmacokinetics after oral administration, 151
- 13-Ethyl-17-hydroxy-18,19-dinor-17 α -pregna-4,9,11-trien-20-yn-3-one, R 2323
- Ethinylestradiol, metabolic fate (baboon), 611
- Extra-amniotic injection of 15-Me-PGF₂ α , cinematographic study, 61
- Factors in use-effectiveness of IUDs, Antigon models, 687
- Fertility regulation, continuous oral low-dosage cyproterone acetate (male), 117
- Fertilizing capacity of epididymal spermatozoa, effect of indomethacin (rat), 455
- Fluid-filled Tecna IUD, clinical experience, 435
- Follicle stimulating hormone, FSH
- Follicle stimulating hormone,
 - effect of oral contraceptives on pituitary release in response to stimulation with LH-RH, 171
 - peripheral blood level after intramuscular administration of DMPA, 461
 - plasma level, effect of immunization with hapten-coupled hCG- β subunit, 579
- FSH, follicle stimulating hormone
- Glucose tolerance, effect of DMPA and combination oral contraceptive, 199
- hCG, β -subunit, immunization and effect on menstrual cycle, 579
- Hysteroscopy, comparison of steerable and rigid hysteroscopes for tubal sterilization, 269
- Immunization, effectiveness of vaccine on neutralization of chorionic gonadotropin (monkey), 639
- Immunization with hapten-coupled hCG- β subunit, effect on menstrual cycle, 579
- Indian medicinal plants, spermicidal potential of saponins, 571
- Indomethacin, 1-(p-chlorobenzoxyl)-5-methoxy-2-methylindol-3-acetic acid

- Indomethacin, effect on fertilizing capacity of epididymal spermatozoa (rat), 455
- Interceptive agents, effect in pseudopregnancy (rat), 487
- Interruption of pregnancy, set of working definitions and criteria for applicable studies, 193
- Intramuscular injection of 15-methyl-PGF₂ α , effect on second trimester abortion, 541
- Intramuscular MPA administration, plasma levels of MPA, estradiol and progesterone (monkey), 343
- Intravaginal contraception, R2323, 671
- Intravaginal MPA administration, pharmacokinetic observations, 319
- Intravaginal ring, IVR
- Intravaginal ring, dl-norgestrel, effect on plasma levels of d-norgestrel and ovarian function, 215
- Intravaginal ring containing R2323, 671
- Intravas device studies (rabbit), 383
- IUD,
 - Antigon models, study and use-effectiveness, 687
 - calcareous deposits, 507
 - copper T and copper 7, statistical study, 655
 - copper-bearing, endometrial morphology, 243
 - Cu-T, copper release rate, 25
 - Cu-T 200, endometrial RNA metabolism, 421
 - Cu-T 200, three-year study, 165
 - fluid-filled Tecna device, clinical experience, 435
 - influences of copper and design on endometrial bleeding (monkey), 9
 - Lippes Loop, tubal migration with subsequent intra-uterine pregnancy, 285
 - Loop vs. Shield, competing risks analysis of termination, 67
- IVR, intravaginal ring
- LH, luteinizing hormone
- LH-RH, luteinizing hormone releasing hormone
- Lipids, serum, effect of DMPA and combination oral contraceptive, 199
- Lippes Loop, tubal migration with subsequent intrauterine pregnancy, 285
- Lippes Loop vs. Dalkon Shield, competing risks analysis of termination, 67
- Liver function tests, effects of cyproterone acetate (male), 403
- Long-acting contraceptive drug, norethindrone enanthate, effect on serum zinc and copper levels, 291
- Luteinizing hormone, LH
- Luteinizing hormone,
 - effect of oral contraceptives on pituitary release in response to stimulation with LH-RH, 171
 - peripheral blood level after intramuscular administration of DMPA, 461
 - plasma level, effect of immunization with haptencoupled hCG- β subunit, 579
- Luteinizing hormone releasing hormone, LH-RH

CONTRACEPTION

- Luteinizing hormone releasing hormone analog, anti-fertility effects (rat), 625
- Luteinizing hormone releasing hormone stimulated gonadotropin release, effect of oral contraceptives, 171
- Luteolytic efficacy of $\text{PGF}_{2\alpha}$, reversal by clomiphene citrate (rat), 447
- 15-Me- $\text{PGF}_{2\alpha}$, 15-methyl-prostaglandin $\text{F}_{2\alpha}$
- Medroxyprogesterone acetate, MPA
- Medroxyprogesterone acetate,
 intramuscular, plasma levels of MPA, estradiol and progesterone (monkey), 343
 oral and intravaginal, pharmacokinetic observations, 319
 peripheral blood level after intramuscular administration of DMPA, 461
 plasma level after intramuscular administration (monkey), 343
- Menstrual cycle, effect of immunization with hpaten-coupled hCG- β subunit, 579
- Menstrual regulation, using paraprofessionals under medical supervision, 367
- Mestranol, metabolic fate (baboon), 611
- Mestranol and ethinylestradiol, estrogenic effect on endometrium, 679
- Metabolic fate of synthetic estrogens (baboon), 611
- 15-Methyl-prostaglandin $\text{F}_{2\alpha}$, 15-Me- $\text{PGF}_{2\alpha}$
- 15-Methyl-prostaglandin $\text{F}_{2\alpha}$, cinematographic study of extra-amniotic injection, 61
- 15(S)15-Methyl- $\text{PGF}_{2\alpha}$ -methyl ester, 15-methyl- $\text{PGF}_{2\alpha}$
- 15(S)15-Methyl- $\text{PGF}_{2\alpha}$ -methyl ester,
 suppositories, evaluation for termination of early pregnancy, 519
 vaginal suppositories, evaluation for cervical dilatation, 661
 vaginal suppositories, evaluation for second trimester pregnancy termination, 661
- (15S)-15-Methyl $\text{PGF}_{2\alpha}$ Tham salt, intramuscular injection, effect on second trimester abortion, 541
- MPA, medroxyprogesterone acetate
- Non-steroidal agents, interceptive activities (rat), 487
- Norethindrone enanthate, effect on serum zinc and copper levels, 291
- d-Norgestrel + ethinyl estradiol, plasma level of d-norgestrel, 563
- d-Norgestrel, plasma level,
 after oral administration, 563
 IVR impregnated with dl-norgestrel, 215
 treatment with silastic implants containing d-norgestrel, 81
 use of d-norgestrel silastic rods, 551
- d-Norgestrel silastic implants, plasma levels of d-norgestrel, estradiol and progesterone, 81
- d-Norgestrel silastic rods,
 influence on ovarian function, 551
 plasma level of d-norgestrel, 551

- Once weekly oral administration of R 2323, contraceptive efficacy, 275
- Oral administration of d-norgestrel, plasma level of d-norgestrel, 563
- Oral contraceptive, combination type, effect on carbohydrate metabolism, 199
 - effect on pulmonary functions, 137
 - efficacy of R 2323 administered once weekly, 275
- Oral contraceptive steroids, bioavailability from capsules, 261
- Oral contraceptives, biochemical basis for "riboflavin defect" (rat), 297
 - dose-dependent inhibition of pituitary to release LH and FSH in response to stimulation with LH-RH, 171
 - effect of vitamin supplements, 309
 - serum prolactin level, 1
 - serum TSH level, 1
- Oral low-dosage cyproterone acetate, fertility regulation (male), 117
- Oral MPA administration, pharmacokinetic observations, 319
- Org 2969, 17 α -ethinyl-18-methyl-11-methylene-4-estren-17 β -ol
 - influence on cervical mucus, 529
 - influence on pituitary-ovarian function, 529
 - influence on vaginal cytology, 529
- Ovarian function, effect of IVR impregnated with dl-norgestrel, 215
 - effect of d-norgestrel silastic rods, 551
- Paraprofessionals, menstrual regulation and early pregnancy termination under medical supervision, 367
- PGE₂, prostaglandin E₂
- PGF_{2 α} , prostaglandin F_{2 α}
- Pharmacokinetic observations, MPA administered orally and intravaginally, 319
- Pharmacokinetics of cyproterone acetate and ethinyloestradiol after oral administration, 151
- Pituitary-ovarian function, influence of Org 2969, 529
- Plastic IUDs, calcareous deposits, 507
- Post-coital estrogens, use in interception of pregnancy, 375
- Post-implantation termination of pregnancy (rat), 487
- Pregnancy, early detection (baboon), 391
- Pregnancy following tubal migration of Lippes Loop, 285
- Pregnancy termination, using paraprofessionals under medical supervision, 367
- Preoperative cervical dilatation, oral PGE₂, 631
- Prerequisites, applicable to studies on interruption of pregnancy, 193
- Progestational compound Org 2969, influence on pituitary-ovarian function, cervical mucus and vaginal cytology, 529
- Progesterone, peripheral blood level after intramuscular administration of DMPA, 461

CONTRACEPTION

- Progesterone, plasma level,
 - after intramuscular administration of MPA (monkey), 343
 - effect of immunization with hapten-coupled hCG- β subunit, 579
 - effect of d-norgestrel silastic rods, 551
 - treatment with silastic implants containing d-norgestrel, 81
- Prolactin, serum level during use of oral contraceptives, 1
- Prostaglandin,
 - effect of intramuscular injection of 15-methyl-PGF $_2\alpha$ on second trimester abortion, 541
 - 15-methyl-PGF $_2\alpha$ vaginal suppositories, evaluation for termination of early pregnancy, 519
 - oral PGE $_2$, preoperative cervical dilatation, 631
- Prostaglandin E $_2$, PGE $_2$
- Prostaglandin E $_2$,
 - effect on reproductive system (male rat), 53
 - oral, preoperative cervical dilatation, 631
- Prostaglandin F $_2\alpha$, PGF $_2\alpha$
- Prostaglandin F $_2\alpha$,
 - reversal of action by clomiphene citrate (rat), 447
 - use in preoperative cervical dilatation, 93
- Prostaglandins,
 - interceptive activities (rat), 487
 - possible mode of action (rat), 447
- Pulmonary functions, effect of oral contraceptive, 137
- Quinacrine hydrochloride, clinical evaluation for sterilization, 75
- R 2323, 13-ethyl-17-hydroxy-18,19-dinor-17 α -pregna-4,9,11-trien-20-yn-3-one
- R 2323, contraceptive efficacy of once weekly oral administration, 275
- R2323, 17 α -ethinyl-17 β -hydroxy-18-methyl-4,9,11-estrien-3-one
- R2323, intravaginal contraception, 671
- Radiological study, extra-amniotic injection of 15-Me-PGF $_2\alpha$, 61
- Release rate of copper, Cu-T IUD, 25
- Reproductive functions, effects of cyproterone acetate (male), 403
- Reproductive physiology, effect of microquantities of cyproterone acetate (male rat), 17
- Reproductive system, effects of PGE $_2$ (male rat), 53
- "Riboflavin defect", biochemical basis with use of oral contraceptives (rat), 297
- RNA metabolism, normal vs. copper treated endometrium, 421
- Saponins, Indian medicinal plants, spermicidal potential, 571
- Saponins from Endod plant, blastocidal and contraceptive actions (rat), 39
- Second trimester pregnancy termination, 15-methyl-PGF $_2\alpha$ vaginal suppositories, 661
- Semen volume and biochemistry, effects of cyproterone acetate (male), 403

- Seminal vesicles, effect of cyproterone acetate (guinea pig), 183
- Serum prolactin, effects of oral contraceptives, 1
- Silastic capsules, cyproterone acetate, effect on fertility (male rat), 17
- Silastic implants containing d-norgestrel, plasma levels of d-norgestrel, estradiol and progesterone, 81
- Silastic IVR containing R2323, 671
- Silastic rods, d-norgestrel, effect on plasma levels of d-norgestrel and ovarian function, 551
- Sperm migration, effect of copper ionisation of cervix (rabbit, human), 331
- Spermatozoa,
 - effects of cyproterone acetate (male), 403
 - epididymal, effect of indomethacin on fertilizing capacity (rat), 455
- Spermatozoal associations, effect of cyproterone acetate (guinea pig), 183
- Spermicidal potential, saponins from Indian medicinal plants, 571
- Statistical study, copper T and copper 7 IUDs, 655
- Sterilization,
 - clinical evaluation of quinacrine hydrochloride, 75
 - comparison of steerable and rigid hysteroscopy, 269
- Steroidal agents, interceptive activities (rat), 487
- Studies on interruption of pregnancy, set of working definitions and criteria, 193
- Study of IUDs, Antigon models, 687
- Suppositories, vaginal 15-methyl-PGF_{2α},
 - evaluation for cervical dilatation, 661
 - evaluation for second trimester pregnancy termination, 661
 - evaluation for termination of early pregnancy, 519
- Synthetic estrogens, metabolic fate (baboon), 611
- Synthetic progestin, R2323, intravaginal contraception, 671
- Tecna IUD, clinical experience, 435
- Termination, competing risks analysis of Loop vs. Shield, 67
- Termination of early pregnancy, evaluation of 15-methyl-PGF_{2α} vaginal suppositories, 519
- Termination of pregnancy,
 - post-implantation (rat), 487
 - use of PGF_{2α} for preoperative cervical dilatation, 93
- Transaminase, serum, effect of DMPA and combination oral contraceptive, 199
- TSH, level during use of oral contraceptives, 1
- Tubal migration of Lippes Loop with subsequent intrauterine pregnancy, 285
- Tubal sterilization, comparison of steerable and rigid hysteroscopes, 269
- Use-effectiveness, IUDs of Antigon models, 687
- Vaccine, effectiveness on neutralization of chorionic gonadotropin (monkey), 639

CONTRACEPTION

- Vaginal cytology, influence of Org 2969, 529
- Vaginal suppositories, 15-methyl-PGF₂ α ,
 - evaluation for cervical dilatation, 661
 - evaluation for second trimester pregnancy termination, 661
 - evaluation for termination of early pregnancy, 519
- Vas deferens, intravas device studies (rabbit), 383
- Visualization of uterine cavity, comparison of steerable and rigid hysteroscopes, 269
- Vitamin supplements, effect during use of oral contraceptives, 309
- Vitamins B₁, B₂, B₆ and A, effect during use of oral contraceptives, 309
- Zinc, serum levels, effect of norethindrone enanthate, 291

